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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/054,864	04/03/1998	CRAIG R. FRINK	AO521/7145(P)	3189

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EXAMINER

TRAN, HAI V

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 08/13/2004

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/054,864

Applicant(s)

FRINK ET AL.

Examiner

Hai Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 and 6-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5 and 19-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7 and 17.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/04/2004 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 5, 21-23, 24, 27-29, 30, 33-35, 39-43 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

The indicated allowability of claims 19-20, 25-26, 31-32, 37-38 and 45-48 are withdrawn in view of the newly discovered reference(s) to Yanagihara et al. (US 6233393) and Paik et al. (US 5241382). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 5, 21, 23-24, 27, 29-30, 33,35-36, 39, and 41-44 are rejected under 35

U.S.C. 103(a) as being unpatentable over Hamilton et al. (US 5799150) in view of Yanagihara et al. (US 6233393)

Regarding apparatus claims 5, 42 and 43, Hamilton discloses a host device (Server) for transferring data to a video-processing device (Client) over a high speed network (Communication link between server and Client; Fig. 2), comprising:

A memory 56;

An input 60 for receiving request packets from the video processing device (Client) over the over a high speed network (between server and Client), wherein each request packet indicated a request from the video processing device (Client) to transfer video data defining a video frame (Col. 5, lines 58-Col. 6, lines 8 and Col. 9, lines 23-38);

An output for sending 60, in response to a request packet, a plurality of data packets including the video data from the memory to the video processing device (Client) over the network (Col. 6, lines 54-65+ and Col. 9, lines 48-56).

Hamilton does not clearly disclose, "wherein each request packets includes a stream identifier"; however, Hamilton discloses each request packets includes an identifier for the media to be opened at the server (Col. 6, lines 48-53). Hamilton further does not clearly disclose "a high speed serial bus using frame by frame flow control" and the sending "data packet includes the stream identifier"; however,

Hamilton discloses the data packet sent also includes the identifier of the receive channel previously provided by the client (Col. 9, lines 53-56).

Yanagihara discloses the use of IEEE-1394 high-speed serial bus for transmitting video data defining a video frame using isochronous and/or asynchronous communication. Inherently IEEE-1394 standard uses frame-by-frame flow control for transmitting video data (Col. 6, lines 35-65) and wherein each request/data packet (Fig. 3A-B, 4 and 7) includes a SID (see Fig. 4; Col. 6, lines 65-Col. 7, lines 21; Col. 8, lines 23-30 and Fig. 9; Col. 9, lines 47-Col. 10, lines 15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton 's network communication interface and protocol to an high speed serial bus with its isochronous and/or asynchronous protocol, as taught by Yanagihara, so to take the advantage of the IEEE-1394 standard network and communication protocol such as to ensure that rate matching between the sender and receiver can be accomplished with ease (Col. 3, lines 47-65).

Claims 21, Yanagihara further discloses wherein at least one of the data packets in the plurality of data packets includes a target field indicating a device to which the video processing device is directed to transfer the video data (see Fig. 5, el. Destination_ID).

Claim 23, Yanagihara further discloses wherein the host device further sends through the output, a data packet including command field indicating a command to

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the video processing device (CTS of Asynchronous packet; Fig. 6A and 7, Col. 7, lines 35-50).

Claim 24, Hamilton discloses a video processing device 50 for transferring data from a host device 40 over a network (see Fig. 2), comprising:

A memory 64;

An output 68 for sending request packet to the host device over the over a network to request transfer of video data, and request video data defining a video frame (Col. 6, lines 48-53); and

An input 68 for receiving a plurality of data packet, wherein each data packet includes the stream identifier and wherein the plurality of data packets include the video data defining the video frame request packet, and for transferring the received video data to the memory 64.

Hamilton does not clearly disclose, "wherein each request packets includes a stream identifier"; however, Hamilton discloses each request packets includes an identifier for defining the media/video frame to be opened at the server (Col. 6, lines 48-53). Hamilton further does not clearly disclose "a high speed serial bus using frame by frame flow control" and the receiving "data packet" includes the stream identifier and wherein the plurality of data packets include the video data defining the video frame request packet; however, Hamilton discloses the data packet sent from the host also includes the identifier of the receive channel previously provided by the client (Col. 9, lines 53-56).

Yanagihara discloses the use of IEEE-1394 high-speed serial bus for transmitting video data defining a video frame using isochronous and/or asynchronous communication. Inherently, IEEE-1394 standard uses frame-by-frame flow control for transmitting video data (Col. 6, lines 35-65) and wherein each request/data packet (Fig. 3A-B, 4 and 7) includes a SID (see Fig. 4; Col. 6, lines 65-Col. 7, lines 21; Col. 8, lines 23-30 and Fig. 9; Col. 9, lines 47-Col. 10, lines 15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton 's network communication interface and protocol to an high speed serial bus with its isochronous and/or asynchronous protocol, as taught by Yanagihara, so to take the advantage of the IEEE-1394 standard network and communication protocol such as to ensure that rate matching between the sender and receiver can be accomplished with ease (Col. 3, lines 47-65).

Claim 27, Yanagihara further discloses wherein at least one of the data packets in the plurality of data packets includes a target field indicating a device to which the video processing device is directed to transfer the video data (see Fig. 5, el. Destination_ID).

Claim 29, Yanagihara further discloses wherein the input 91 further receives a data packet including command field indicating a command to the video processing device (CTS of Asynchronous packet; Fig. 6A and 7, Col. 7, lines 35-50).

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Regarding method claim 30 is analyzed with respect to apparatus claim 24.

Regarding method claim 33 is analyzed with respect to apparatus claim 27.

Regarding method claim 35 is analyzed with respect to apparatus claim 29

Regarding method claim 36 is analyzed with respect to apparatus claim 5.

Regarding method claim 39 is analyzed with respect to apparatus claim 21.

Regarding method claim 41 is analyzed with respect to apparatus claim 23.

Regarding claim 44, "wherein the request packets includes a packet rate field that specifies a packet rate at which the host device is to send data to the video processing" is further inherently met by Hamilton in view of Yanagihara in which Yanagihara discloses the use of IEEE-1394. Accordingly, IEEE-1394 standard inherently teaches that an arbitration sequence occurs when a node is ready to transmit a packet of information to a destination node. The source node requests its physical layer to gain control of the bus. When bus control has been obtained for an asynchronous subaction, the source node sends the following packet information: a data prefix that may contain speed information; the source and destination address; a transaction code; a transaction label; a retry code; a data quadlet or data block; a header CRC character; a data block CRC character, if applicable; and a packet termination code.

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2. Claims 19-20, 22, 25-26, 28, 31-32, 34, 37-38, 40, and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton et al. (US 5799150) in view of Yanagihara et al. (US 6233393), and further in view of Paik et al. (US 5241382).

Claims 19, 45 and 47, Hamilton in view of Yanagihara does not clearly disclose, "wherein a component of the video data has a precision greater than a byte and wherein the data representing the component of the video data is packed into bytes in the plurality of packets"; however, Yanagihara discloses video data is packets into plurality of packets that have a precision grater than a byte (Col. 6, lines 65-Col. 7, lines 12 and Col. 7, lines 50-Col. 8, lines 13) because the length of the source packet of the 1394 AV/C protocol is a fixed length specific to each equipment in which the source packet is divided into plurality of data blocks, i.e., 1, 2, 4, or 8 data blocks, which are sequentially transmitted as a plurality of isochronous packets (see Fig. 7).

Paik discloses a component of the video data has a precision greater than a byte (Col. 7, lines 15-35) and wherein the data representing the component of the video data is packed into bytes in the plurality of packets (Col. 8, lines 48-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton in view of Yanagihara to encode video data , as taught by Paik, so to provide a data format that includes various data fields that enable the receiver to avoid unnecessary processing (Col. 3, lines 49-65+)

Claims 20, 46 and 48, Paik further discloses further discloses wherein the plurality of packets includes a component size field indicating a number of bits per component (DLEN, Col. 5, lines 27-28).

Claim 22, Hamilton in view of Yanagihara does not clearly disclose "wherein a data packet in the plurality of data packets includes a boundary signal indicating whether the data packet includes a last component of the video data defining the requested video frame"

Paik further discloses wherein a data packet in the plurality of data packets includes a boundary signal indicating whether the data packet includes a last component of the video data defining the requested video frame (Fig. 2 and 3; Col. 8, lines 43-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton in view of Yanagihara to encode video data , as taught by Paik, so to provide a data format that includes various data fields that enable the receiver to avoid unnecessary processing (Col. 3, lines 49-65+)

Claim 25, Hamilton in view of Yanagihara does not clearly disclose, "wherein a component of the video data has a precision greater than a byte and wherein the data representing the component of the video data is packed into bytes in the plurality of packets"; however, Yanagihara discloses video data is packets into plurality of packets that have a precision grater than a byte (Col. 6, lines 65-Col. 7,

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lines 12 and Col. 7, lines 50-Col. 8, lines 13) because the length of the source packet of the 1394 AV/C protocol is a fixed length specific to each equipment in which the source packet is divided into plurality of data blocks, i.e., 1, 2, 4, or 8 data blocks, which are sequentially transmitted as a plurality of isochronous packets (see Fig. 7).

Paik discloses a component of the video data has a precision greater than a byte (Col. 7, lines 15-35) and wherein the data representing the component of the video data is packed into bytes in the plurality of packets (Col. 8, lines 48-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton in view of Yanagihara to encode video data, as taught by Paik, so to provide a data format that includes various data fields that enable the receiver to avoid unnecessary processing (Col. 3, lines 49-65+).

Claim 26, Paik further discloses further discloses wherein the plurality of packets includes a component size field indicating a number of bits per component (DLEN, Col. 5, lines 27-28).

Claim 28, Hamilton in view of Yanagihara does not clearly disclose, "wherein a data packet in the plurality of data packets includes a boundary signal indicating whether the data packet includes a last component of the video data defining the requested video frame".

Paik further discloses wherein a data packet in the plurality of data packets includes a boundary signal indicating whether the data packet includes a last

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component of the video data defining the requested video frame (Fig. 2 and 3; Col. 43-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamilton in view of Yanagihara to encode video data, as taught by Paik, so to provide a data format that includes various data fields that enable the receiver to avoid unnecessary processing (Col. 3, lines 49-65+)

Regarding method claim 31 is analyzed with respect to apparatus claim 25.

Regarding method claim 32 is analyzed with respect to apparatus claim 26.

Regarding method claim 34 is analyzed with respect to apparatus claim 28.

Regarding method claim 37 is analyzed with respect to apparatus claim 19.

Regarding method claim 38 is analyzed with respect to apparatus claim 20.

Regarding method claim 40 is analyzed with respect to apparatus claim 22.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is 703-308-7372.

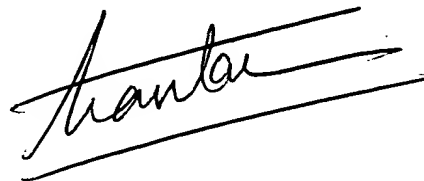
The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT:ht
08/06/2004

A handwritten signature in black ink, appearing to read "HAITRAN", is written over two horizontal lines.

HAITRAN
PATENT EXAMINER